

TITLE OF INVENTION

COMPOSITE TWIST CORE-SPUN YARN AND METHOD AND DEVICE FOR
ITS PRODUCTION

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ABSTRACT

A substantially torqueless composite dual core-spun yarn (10) has a
10 substantially inelastic central hard core (20) covered with a dual-spun fiber covering
(30). The central hard core (20) has an elongation at break less than 50% and a Z or S
twist, and the fiber covering (30) comprises fibers twisted on the core (20) with an S or
Z twist opposite to that of the core. The opposite twists of the core (20) and of the
covering (30) exert opposite and substantially equal torques. This yarn is produced by
15 introducing two slivers (30A,30B) forming the covering (30) and a central (30) core in
a spinning triangle (40). The core (20) is fed overtwisted S or Z and the slivers
(30A,30B) have an opposite Z or S twist corresponding to about 30% to 70% of the
twist of the fed overtwisted core (20) that detwists during spinning. The inelastic core
(20) is fed at controlled speed to compensate for the angle of feed and to compensate
20 for detwisting, and is guided into the spinning triangle (40) by a guide groove (52) in a
feed roller (50).